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09/750,862	12/28/2000	Yun Lung Chen	1916	2191
25859	7590	02/23/2006	EXAMINER	
WEI TE CHUNG FOXCONN INTERNATIONAL, INC. 1650 MEMOREX DRIVE SANTA CLARA, CA 95050			PATEL, NIHIR B	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed on December 7<sup>th</sup>, 2005 have been fully considered but they are not persuasive. The applicant argues that the slots (4) in Houdry is provided for welding the so called connecting tab to the tube and therefore the applicant's invention is distinguishably different from Houdry. The examiner disagrees. The slots of Houdry is provided for welding as well as receiving an end of the connecting tab of an adjacent one of the fins as can be seen from figure 2.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims **1, 4, 21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 5,959,837) in view of Houdry (US 2,216,778). **Referring to claims 1, 21 and 22**, Yu discloses the applicant's invention as claimed with the exception of providing fins that comprises

a through hole that forms a connecting tab extending around a periphery of the through hole, a slot being defined in the connecting tab of each of the fins and receiving an end of the connecting tab of an adjacent one of the fins. Houdry discloses a heat exchanger member and method of making that does provide fins that comprises a through hole that forms a connecting tab extending around a periphery of the through hole, a slot being defined in the connecting tab of each of the fins and receiving an end of the connecting tab of an adjacent one of the fins (**see figures 1 through 3**). Therefore it would have been obvious to modify Yu's invention by providing fins that comprises a through hole that forms a connecting tab extending around a periphery of the through hole, a slot being defined in the connecting tab of each of the fins and receiving an end of the connecting tab of an adjacent one of the fins as taught by Houdry in order to improve the heat transfer process.

**Referring to claims 4**, Yu discloses the applicant's invention as claimed with the exception of providing a pair of locating portions extending from each of the fins for forming intervals between the fins. Houdry discloses a heat exchanger member and method of making that does provide a pair of locating portions extending from each of the fins for forming intervals between the fins (**see figures 1 through 3**). Therefore it would have been obvious to modify Yu's invention by providing a pair of locating portions extending from each of the fins for forming intervals between the fins as taught by Houdry in order to improve the heat transfer process.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 5,959,837) in view of Houdry (US 2,216,778) as applied to claims 1 and 4 above, and further in view of Gebelius (US 3,780,797). **Referring to claims 5**, Yu discloses the applicant's invention as

claimed with the exception of providing a pair of abutting flanges respectively extending vertically towards each other from free ends of the locating portions of each of the fins, for abutting an adjacent one of the fins. Houdry discloses fins but fails to disclose a pair of abutting flanges that respectively extend vertically towards each other from free ends of the locating portions of each of the fins for abutting an adjacent one of the fins. Gebelius discloses convectors that does provide a pair of abutting flanges respectively extending vertically towards each other from free ends of the locating portions of each of the fins, for abutting an adjacent one of the fins (see figures 2 and 4). Therefore it would have been obvious to modify Yu's invention by providing a pair of abutting flanges respectively extending vertically towards each other from free ends of the locating portions of each of the fins, for abutting an adjacent one of the fins as taught by Gebelius in order to improve the heat transfer process.

Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (5,959,837) in view of Buschow et al. (US 2,585,912). **Referring to claims 6**, Yu discloses the applicant's invention as claimed with the exception of providing duct that is made of highly heat-conductive metal. Buschow discloses a regenerator for the recovery of the cold content of gases that does provide duct that is made of highly heat-conductive metal. Therefore it would have been obvious to modify Yu's invention by providing duct that is made of highly heat-conductive metal as taught by Buschow in order to improve the heat transfer process.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 5,959,837) in view of Lai (US 5,509,465). **Referring to claims 8**, Yu discloses the applicant's invention as claimed with the exception of providing at least one of the casing that defines a pair of end tabs for abutting outmost fins. Lai discloses a heat-dissipating device for a central

processing unit chip that does provide at least one of the casing that defines a pair of end tabs for abutting outmost fins (**see figure 3**). Therefore it would have been obvious to modify Yu's invention by providing at least one of the casing that defines a pair of end tabs for abutting outmost fins as taught by Lai in order to improve the heat transfer process.

**Referring to claim 9**, Yu discloses the applicant's invention as claimed with the exception of providing a latching hole that is defined in each of the casings for interferentially engaging with the duct. Lai discloses a heat-dissipating device for a central processing unit chip that does provide a latching hole that is defined in each of the casings for interferentially engaging with the duct (**see figure 3**). Therefore it would have been obvious to modify Yu's invention by providing a latching hole that is defined in each of the casings for interferentially engaging with the duct as taught by Lai in order to improve the heat transfer process.

**Referring to claims 7**, Yu discloses applicant's invention as claimed with the exception that Yu doesn't provide an L-shaped casing to hold the duct and fins together but rather provides a different shape of frame. You can have an L-shaped frame or an O shaped frame it is a matter of design choice, and it will not solve any stated problem or produce any new and/or unexpected results.

***Allowable Subject Matter***

Claims **11 and 13-20** are allowed.

Claim **10** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (703)306-3463. The examiner can normally be reached on 7:30 to 4:30 every other fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 703-308-0101. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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Nihir Patel  
February 7<sup>th</sup>, 2006



Henry Bennett  
Supervisory Patent Examiner  
Group 3700